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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,632	09/28/2001	Yohannes Chonde	60418A	5027
109	7590	11/07/2003	EXAMINER	
THE DOW CHEMICAL COMPANY INTELLECTUAL PROPERTY SECTION P. O. BOX 1967 MIDLAND, MI 48641-1967			COONEY, JOHN M	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/966,632	CHONDE ET AL.	
	Examiner	Art Unit	
	John m Cooney	1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 shfts.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claims 1-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 0903.

Applicant's election with traverse of Group II. (claims 7-20) in Paper No. 09/29/03 is acknowledged. The traversal is on the ground(s) that insufficient demonstration of basis for restriction is presented. This is not found persuasive because examiner maintains that sufficient basis for restriction is set forth, and no reference is required, in the instant case, to support examiner's position as the reasons are maintained on their face. Applicants' arguments are directed towards elements (i.e. proximity degrees and closed cell structures) which are not supported by claim limitations in whole or in part.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 1-6 drawn to an invention nonelected with traverse in Paper No. 0903. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Formalities

The Japanese references submitted on the IDS received 7/8/03 have not been indicated as considered because the references (i.e. the abstracts indicated as provided) have not been submitted and/or received and no publication dates have been provided or are available. This must be addressed in order for these references to be considered in the next Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The terms "large" and "small" in claim 7 is a relative term which renders the claim indefinite. The terms "large and small" are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The multimodal foam structure is confusing as to intent due to the use of the relative claim language.

Claims 9-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' employment of the language "defined therein" is open-ended claim language which renders the claims confusing as to intent because it can not be determined what limitation is intended by this language. Correction is required.

Claims 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "non-plasticizing" in claim 10 is a relative term which renders the claim indefinite. The term "non-plasticizing" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The determination of what stabilizers are encompassed by the claim can not be made because of the employment of the relative claim language.

Claim 15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "analogous foam" in claim 15 and 17 is a relative term which renders the claim indefinite. The term "analogous foam" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Determination of what would be considered a comparable foam in order to give the limitations of claims 15 and 17 meaning in a patentable sense can not be made because of the employment of the relative terminology "analogous foam".

Claims 7-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "proximate" in claim 7 is a relative term which renders the claim indefinite. The term "proximate" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The employment of the term "proximate" (i.e. close or near) to define the location of the blowing agent stabilizer renders the claims confusing as to intent because it can not be determined what location is "proximate" or "non-proximate" to the large cells.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Paquet et al.(5,210,105).

Paquet et al. discloses preparations of thermoplastic multimodal foams and articles derived therefrom containing varied sized cells, materials reading on applicants'

claimed blowing agent stabilizers in amounts as claimed, blowing agents, stabilizing agents, additives, and carbon-black, and having insulative values and densities inclusive of those claimed (see the entire document). The particular stabilizers of applicants' claims would be readily envisioned from the teachings of Paquet et al.'s disclosure.

Claim Rejections - 35 USC § 103

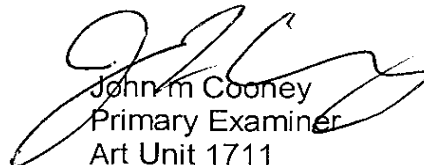
Claims 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paquet et al. as applied to claims 7-20 above, and further in view of Gusavage et al.(5,670,552) and Chaudhary(5,710,186).

Assuming *arguendo* that claims 10-12 differ from Paquet et al. in that the specific stabilizers identified by claims 10-12 are not readily envisioned by Paquet et al.'s disclosure, it is held Gusavage et al. (see column 5 lines 49-60) and Chaudhary (see column 4 line 66 – column 5 line 13) disclose the employment of these materials as equivalent employable materials in the preparation of polystyrenic foams. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the additional thermoplastic materials described by Gusavage et al. and Chaudhary for the purpose of imparting their equivalent effect in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results. It is *prima facie* obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. *In re Ruff* 118 USPQ 343; *In re Jezei* 158 USPQ 99; the express suggestion to substitute one equivalent for

another need not be present to render the substitution obvious. *In re Font*, 213 USPQ 532. Additionally, Gusavage et al. discloses employment of organomodified dimethylsiloxane and other siloxanes for the purpose of enhancing foam properties in products realized. Accordingly, it would have been obvious for one having ordinary skill in the art to have employed the siloxane materials of Gusavage et al. for the purpose of imparting their foam property enhancing effect in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John m Cooney whose telephone number is 703-308-2433. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, james seidleck, can be reached on (703) 308-2462. **Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5665.** The centralized facsimile number is **(703) 872-9306**. The changes are effective October 1, 2003.


John m Cooney
Primary Examiner
Art Unit 1711